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dom external fields  Cukrowski, A.S., S. Fritzsche and W. Stiller, Synergistic effects in bimolecular reactions in a dilute gas  Cutler, J.N., G.M. Bancroft and K.H. Tan, High-resolution Ge 3d and Sn 4d core-level photoelectron spectra. Ligand field and vibrational effects  183 (1994) 375  181 (1994) 7		190 (1995) 311
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a dilute gas  Cutler, J.N., G.M. Bancroft and K.H. Tan, High-resolution Ge 3d and Sn 4d core-level photoelectron spectra. Ligand field and vibrational effects  181 (1994) 7  181 (1994) 461		183 (1994) 375
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***	.00 () 2.0

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